

Appl. No. 10/803,191  
Reply to Office Action of June 15, 2005

### REMARKS

Applicants appreciate the thorough examination of the application that is reflected in the Office Action dated June 15, 2005, and the Examiner's indication that claims 42, 43 and 46 have been allowed.

Applicants change the dependency of claims 44 and 45 to correct typographical errors so that dependent claims 44 and 45 now properly depend from allowed claims 43 and 42, respectively. These amendments do not alter the scope of claims 44 and 45, but are instead made merely to correct a typographical error. Applicants also amend claim 46 to correct a typographical error. Thus, since claims 42 and 43 have been allowed, Applicants submit that claims 42-46 are in condition for allowance.

The Office indicates that claims 19, 20, 40 and 41 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. To expedite the prosecution of this application, Applicants rewrite claims 19 and 40 in independent form to explicitly include the limitations of independent claims 1 and 21, respectively. Because claims 19 and 40 were indicated as being allowable, Applicants submit that pending claims 19-20 and 40-41 are also in condition for allowance.

Applicants also change the dependency of claims 17 and 38 to correct typographical errors so that dependent claims 17 and 38 now properly depend from claims 16 and 37, respectively. These amendments do not alter the scope of claims 17 and 38, but are instead made merely to correct a typographical error.

Applicants also add new claim 22 which depends from claim 21. Claim 22 was inadvertently excluded from the application at filing. New claim 22 is supported, for example, by claim 2 and other portions of the specification. Applicants also add new claims 47-48 which depend from claim 1 and new claims 49-50 which depend from claim 21. New claims 47-50 are supported, for example, by FIGS. 2-6 of the application and their corresponding descriptions.

Claims 1-50 (4 independent claims; 50 total claims) are pending in the application. Claims 19-20 and 40-41 are in condition for allowance since they were indicated as being allowable and have been rewritten in independent form, and 42-46 have been allowed since

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dependent claims 44 and 45 now properly depend from allowed claims 43 and 42, respectively. Reexamination and reconsideration of the application are respectfully requested.

#### **Claim Objections**

The Office objects to claim 22 since it was missing from the application as filed. Applicants add new claim 22 which depends from claim 21. Applicants respectfully submit that the addition of claim 22 renders this ground of objection moot. Accordingly, Applicants respectfully request that this ground of objection be withdrawn.

#### **Claim Rejections Under 35 U.S.C. 112, 2<sup>nd</sup> paragraph**

The Office rejects claim 44 under 35 U.S.C. 112, 2<sup>nd</sup> paragraph as being indefinite since the recitations "said first power" and "said second power" appearing in claim 44 allegedly "lack antecedent basis."

Applicants submit that the Office's rejection of claim 44 under 35 U.S.C. 112, 2<sup>nd</sup> paragraph is improper since claim 44 is definite as filed.

Applicants do, however, acknowledge that claim 44 is objectionable since the dependency of original claim 44 included a typographical error. The preamble of claim 44 clearly reflects that claim 44 is a method claim, whereas the preamble of claim 4 recites a relay device. As such, rejecting claim 44 as indefinite was improper.

To correct this typographical error, Applicants amend dependent claim 44 such that it now properly depends from allowed method claim 42, as opposed to relay device claim 4. Applicants submit that changing the dependency of claim 44 to correct this typographical error does not alter the scope of claim 44 as filed.

Accordingly, for at least the foregoing reasons, Applicants submit that the rejection of claim 44 under 35 U.S.C. 112, 2<sup>nd</sup> paragraph should be withdrawn.

#### **Art-based Rejections**

##### **Claims 1 and 21**

The Office rejects claims 1-8, 10-13, 16, 18, 21, 23-29, 31-34, 37, 39 and 45 under 35 U.S.C. 103(a) as being unpatentable over Eberhardt et al. (U.S. Pat. 6,107,920) (hereinafter referred to as "Eberhardt") in view of Duan (U.S. Pat. 6,147,606) (hereinafter referred to as "Duan"), and rejects claims 9, 14, 15, 17, 30, 35, 36, and 38 further in view of Platt (U.S. Pat. 5,825,291) (hereinafter referred to as "Platt").

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Applicants respectfully traverse this rejection for at least the following reasons.

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation to modify a reference or to combine the teachings of multiple references. Second, there must be a reasonable expectation of success. Third, the prior art must teach or suggest all of the recited claim limitations. Of course, the teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in Applicant's disclosure. Applicants submit that all of the criteria have not been met in this case.

Claim 1 relates to relay device for a Radio Frequency IDentification (RFID) transponder. The relay device comprises:

- a first antenna;
- a second antenna;
- a transmission line coupling said first antenna and said second antenna; and
- an impedance adjusting circuit coupled to said transmission line and configured for coupling to the RFID transponder. (Emphasis added.)

Applicants respectfully traverse the rejection of claim 1 for at least the following reasons.

The Office Action of June 15, 2005 indicates that column 4, lines 17-22 of the Eberhardt reference allegedly teaches the "transmission line" recitation of claim 1. The Office Action acknowledges that Eberhardt does not specifically disclose an impedance adjusting circuit coupled to said transmission line and configured for coupling to the RFID transponder, but cites the Duan reference as allegedly teaching "an impedance adjusting circuit coupled to said transmission line and configured for coupling to the RFID transponder."

While the Office Action dated June 15, 2005 alleges that the Eberhardt reference teaches the "transmission line" recitation of claim 1, it is unclear which element of the Eberhardt reference allegedly meets the "transmission line" recitation of claim 1.

Applicants submit that the Eberhardt reference fails to disclose that "a transmission line coupling said first and second antennas," as recited claim 1. As shown in FIG. 1 and as discussed at col. 4:16-67 of the Eberhardt reference, nothing in the Eberhardt reference discloses that the first antenna element 24 and the second antenna element 26 are coupled by a transmission line. Rather, as shown in FIG. 1 of the Eberhardt reference, the first coupling

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region 28 and the second coupling region 30 include a conductive pad area for electrically coupling a chip assembly 12. A chip assembly is not a “transmission line,” as recited in claim 1. Thus, Applicants submit that the Eberhardt reference fails to disclose, for example, that “a transmission line coupling said first and second antennas,” as recited in claim 1. Applicants submit that the Duan reference, relied on by the Office as allegedly teaching “an impedance adjusting circuit coupled to said transmission line and configured for coupling to the RFID transponder,” and the Platt reference are similarly deficient.

Independent claim 21 also requires “a transmission line coupling said antennas.” Applicants submit that claim 21 is also patentable for at least the reasons stated above with respect to claim 1.

Applicants note that the cited references also fail to teach or suggest concepts, such as, “an impedance adjusting circuit coupled to said transmission line and configured for coupling to the RFID transponder,” or “an impedance adjusting circuit coupling the RFID transponder and said transmission media,” as recited in claims 1 and 21, respectively. The Office cites col. 2, lines 35-55 of the Duan reference as teaching these limitations, however, Applicants note that the Duan reference merely teaches that the impedance of the tag antenna can be adjusted as opposed to, “an impedance adjusting circuit coupled to said transmission line and configured for coupling to the RFID transponder,” or “an impedance adjusting circuit coupling the RFID transponder and said transmission media,” as recited in claims 1 and 21, respectively.

Accordingly, for at least the reasons stated above, Applicants respectfully request reconsideration and withdrawal of the rejections of independent claim 1, along with dependent claims 2-18 and 47-48; and claim 21, along with dependent claims 22-39 and 49-50.

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In conclusion, for the reasons given above, all claims now presently in the application are believed allowable and such allowance is respectfully requested. Should the Examiner have any questions or wish to further discuss this application, Applicant requests that the Examiner contact the undersigned attorney at (480) 385-5060.

If for some reason Applicant has not requested a sufficient extension and/or have not paid a sufficient fee for this response and/or for the extension necessary to prevent abandonment on this application, please consider this as a request for an extension for the required time period and/or authorization to charge Deposit Account No. 50-2091 for any fee which may be due.

Respectfully submitted,

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